

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**Draft**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:020**

**Permittee Name:** Safety-Kleen Systems, Inc. - New Castle Recycle Center  
**Mailing Address:** 3700 Lagrange Road Smithfield, Kentucky 40068

**Source Name:** Safety-Kleen Systems, Inc.  
**Mailing Address:** 3700 Lagrange Road  
Smithfield, Kentucky 40068

**Source Location:** 3700 Lagrange Road, Smithfield, Kentucky 40068

**Permit Number:** V-05-060  
**Source A. I. #:** 1854  
**Activity #:** APE20040001  
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**Regional Office:** Florence Regional Office  
8020 Veterans Memorial Drive, Suite 110  
Florence, KY 41042

**County:** Henry

**Application**  
**Complete Date:** March 8, 2004  
**Issuance Date:** XXXX, 2005  
**Expiration Date:** XXXX, 2010

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**John S. Lyons, Director  
Division for Air Quality**

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## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

## **SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **01 (B02) – Cleaver Brooks Indirect Heat Exchanger, Model 800-200 “Boiler # 2”**

#### **Description:**

One (1) indirect heat exchanger with a maximum rated capacity of 8.4 mmBtu/hr, with natural gas as primary fuel and no.2 fuel oil as secondary fuel.

Construction commenced: 1982

Control: None

#### **APPLICABLE REGULATIONS:**

401 KAR 59:015. New indirect heat exchangers commenced on or after April 9, 1972.

#### **1. Operating Limitations:**

None

#### **2. Emission Limitations:**

- a) Pursuant to Regulation 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.451 pounds per mmBtu of actual heat input on a three hour average.
- b) Pursuant to Regulation 401 KAR 59:015, Section 5(1)(a), sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 1.85 pounds per mmBtu of actual heat input on a three hour average.
- c) Pursuant to Regulation 401 KAR 59:015, Section 4(2), regardless of the fuel used, emissions shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity based on a six minute average, shall be permissible for not more than six consecutive minutes in any 60 consecutive minutes during cleaning the fire-box or blowing soot.

#### **Compliance Demonstration Method:**

- a) Compliance with the particulate emission limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 7.6 lbs total particulates per million standard cubic feet (mmscf) of natural gas burned and a fuel heat capacity of 1020 mmBtu/mmscf. Compliance with the particulate emission limit is demonstrated when burning No. 2 fuel oil, based on an AP-42 emission factor of 2 lbs total particulate per 1000 gallons and a fuel heat capacity of 140,000 Btu per gallon.

The maximum particulate emissions from natural gas and #2 fuel oil combustion shall be calculated as follows:

Particulate emissions (lb/mmBtu) from #2 fuel oil combustion = (AP-42 emission factor: (2.0 lbs/1,000 gallons))/(heating value from fuel analysis in mmBtu/1,000 gallons)

- b) Compliance with the sulfur dioxide limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 0.6 lbs of sulfur dioxide per mmscf and a fuel heat capacity of 1020 mmBtu/mmscf. Compliance with the sulfur dioxide limit is

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

demonstrated when burning No. 2 fuel oil if the lbs of sulfur dioxide per mmBtu is less than the limit, based on an AP-42 emission factor of 142S, the fuel oil sulfur content S, and a fuel heat capacity of 140,000 Btu per gallon. Refer to Section 4, Specific Monitoring Requirements for determination of fuel oil sulfur content.

The maximum sulfur dioxide emissions from #2 fuel oil shall be calculated as follows:  
$$\text{SO}_2 \text{ emissions (lb/mmBtu) from \#2 fuel oil combustion} = (\text{AP-42 emission factor of 142S lbs sulfur/1,000 gallons}) / (\text{heating value from fuel analysis in mmBtu/1,000 gallons}).$$

- c) Compliance with the opacity limit is demonstrated when burning natural gas. Refer to Section 4, Specific Monitoring Requirements for compliance with the opacity limitation when burning No. 2 fuel oil.

**3. Testing Requirements:**

None

**4. Specific Monitoring Requirements:**

The permittee shall monitor and maintain records of the following information:

- a) The sulfur content of fuel oil burned. The sulfur content may be determined by fuel sampling and analysis or by fuel supplier certification.
- b) If No. 2 fuel oil is burned, the permittee shall perform a qualitative visible observation of the opacity of emissions, when burning No. 2 fuel oil from the stack on a monthly basis and maintain a log of the observation. If visible emissions from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs.

**5. Specific Recordkeeping Requirements:**

Records shall be maintained of the visual observations of stack emissions, any EPA Reference Method 9 test performed, and any necessary repairs made as a result of not meeting an emission limitation.

**6. Specific Reporting Requirements:**

None

## **SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **18 (B01) – Cleaver Brooks Indirect Heat Exchanger, 400 HP 150 lb Steam Boiler Model CB 655 400 “Boiler # 1”**

#### **Description:**

One (1) indirect heat exchanger with a maximum rated capacity of 16.7mmBtu/hr, with natural gas as primary fuel and no.2 fuel oil as secondary fuel.

Construction commenced: 1987

Controls: None

#### **APPLICABLE REGULATIONS:**

401 KAR 59:015. New indirect heat exchangers commenced after April 9, 1972.

40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers. [*Pursuant to 40 CFR 63.7056 (b), this existing large gaseous fuel unit is subject to no provision of 40 CFR 63 Subpart DDDDD other than the initial notification requirement which was submitted by the permittee to the Division on December 4, 2004*]

401 KAR 63:002, Section 2(5) - 40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants, Subpart DDDDD, incorporated by reference.

#### **1. Operating Limitations:**

None

#### **2. Emission Limitations:**

- a) Pursuant to Regulation 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.451 pounds per mmBtu of actual heat input on a three hour average.
- b) Pursuant to Regulation 401 KAR 59:015, Section 5(1)(c)(1), sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 1.85 pounds per mmBtu of actual heat input on a three hour average.
- c) Pursuant to Regulation 401 KAR 59:015, Section 4(2), regardless of the fuel used, emissions shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity based on a six minute average, shall be permissible for not more than six consecutive minutes in any 60 consecutive minutes during cleaning the fire-box or blowing soot.

#### **Compliance Demonstration Method:**

- a) Compliance with the particulate emission limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 7.6 lbs total particulates per million standard cubic feet (mmscf) of natural gas burned and a fuel heat capacity of 1020 mmBtu/mmscf. Compliance with the particulate emission limit is demonstrated when burning No. 2 fuel oil, based on an AP-42 emission factor of 2 lbs total particulate per 1000 gallons and a fuel heat capacity of 140,000 Btu per gallon.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

The maximum particulate emissions from natural gas and #2 fuel oil combustion shall be calculated as follows:

Particulate emissions (lb/mmBtu) from #2 fuel oil combustion = (AP-42 emission factor: (2.0 lbs/1,000 gallons)/(heating value from fuel analysis in mmBtu/1,000 gallons)

- b) Compliance with the sulfur dioxide limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 0.6 lbs of sulfur dioxide per mmscf and a fuel heat capacity of 1020 mmBtu/mmscf. Compliance with the sulfur dioxide limit is demonstrated when burning No. 2 fuel oil if the lbs of sulfur dioxide per mmBtu is less than the limit, based on an AP-42 emission factor of 142S, the fuel oil sulfur content S, and a fuel heat capacity of 140,000 Btu per gallon. Refer to Section 4, Specific Monitoring Requirements for determination of fuel oil sulfur content.

The maximum sulfur dioxide emissions from #2 fuel oil shall be calculated as follows:  
SO<sub>2</sub> emissions (lb/mmBtu) from #2 fuel oil combustion = (AP-42 emission factor of 142S lbs sulfur/1,000 gallons)/(heating value from fuel analysis in mmBtu/1,000 gallons).

- c) Compliance with the opacity limit is demonstrated when burning natural gas. Refer to Section 4, Specific Monitoring Requirements for compliance with the opacity limitation when burning No. 2 fuel oil.

3. **Testing Requirements:**

None

4. **Specific Monitoring Requirements:**

The permittee shall monitor and maintain records of the following information:

- a) The sulfur content of fuel oil burned. The sulfur content may be determined by fuel sampling and analysis or by fuel supplier certification.
- b) If No. 2 fuel oil is burned, the permittee shall perform a qualitative visible observation of the opacity of emissions, when burning No. 2 fuel oil from the stack on a monthly basis and maintain a log of the observation. If visible emissions from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs.

5. **Specific Recordkeeping Requirements:**

Records shall be maintained of the visual observations of stack emissions, any EPA Reference Method 9 test performed, and any necessary repairs made as a result of not meeting an emission limitation.

6. **Specific Reporting Requirements:**

None

## **SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **GROUP REQUIREMENTS**

#### **03 (VP1,P1 )                    Evaporation, Vacuum System and Distillation Process**

##### **Description:**

Distillation Column, Reboilers, Heat Exchangers and associated pipeline equipment\*\*

Required Control Equipment: Thermal Oxidizer.

Construction commenced - between 1970 and 1985.

#### **21 (MP02)                    Automatic Drum Decant System (ADDS)/Shredder**

##### **Description:**

The ADDS system is a completely enclosed automated drum processing system that is monitored and controlled by a computer system. The ADDS is utilized to process those materials that are in a liquid or semi-solid matrix. The totally enclosed unit is purged with nitrogen to ensure that the oxygen level is always maintained below 5%.

Required Control Equipment: Thermal Oxidizer.

Construction commenced - 1991

#### **23 (MP01, MP03)        Drum Shredder, N<sub>2</sub> purge, Shaker Screen, Hydrapulper**

##### **Description:**

Drums containing both liquid and solid material may be shredded, conveyed into a hydrapulper (mixing vessel), blended into fuel, and pumped to a tank for offsite shipment. The Shredding System is also utilized to shred drums consisting entirely of solid material. The Shredder System is a completely automated and totally enclosed unit purged with nitrogen to ensure that the oxygen level inside the system always remains below 5%.

Required Control Equipment: Thermal Oxidizer.

Construction commenced - 1991

#### **24 (-)                    Solids Separator (Screw Press, Squeezer System)**

##### **Description:**

The Squeezer System is utilized to process solid materials from the Shredder System that contain absorbed liquids. The Squeezer equipment consists of an enclosed nitrogen purge system.

Required Control Equipment: Thermal Oxidizer.

Construction commenced - 1996

\*\* At the time of this permit issuance, this unit is not operating.

### **APPLICABLE REGULATIONS:**

40 CFR 63, Subpart DD: National Emission Standards for Hazardous Air Pollutant Emissions from Off-Site Waste and Recovery Operations.

401 KAR 63:002, Sections 2 and 3(1)(x) - *40 CFR Part 63.680 to 63.698 (Subpart DD) National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations, incorporated by reference.*

401 KAR 63:020, *Potentially hazardous matter or toxic substances.*



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****1. Operating Limitations:**

- a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the Evaporation, Vacuum System and Distillation Process, Automatic Drum Decant System (ADDS)/Shredder, Drum Shredder with nitrogen (N<sub>2</sub>) purge, and solids separator, except when otherwise specified in 40 CFR Part 63, Subpart DD. [40 CFR Part 63, Subpart A]

**Standards: Transfer systems (40 CFR 63.689)**

- b) For the transfer (piping) systems associated with the respective emission units that are subject to this section, but which are not individual drain systems, the permittee shall control air emissions by using one of the transfer systems specified in paragraphs (b)(i) through (b)(iii) below: [40 CFR 63.689 (c)]
  - i. A transfer system that uses covers in accordance with the requirements specified in paragraph (c) given below.
  - ii. A transfer system that consists of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).
  - iii. A transfer system that is enclosed and vented through a closed-vent system to a control device in accordance with the requirements specified in paragraphs (b)(iii)(1) and (b)(iii)(2) given below.
    - 1) The transfer system is designed and operated such that an internal pressure in the vapor headspace in the enclosure is maintained at a level less than atmospheric pressure when the control device is operating, and
    - 2) The closed-vent system and control device are designed and operated in accordance with the requirements of paragraph (e) below.

**Compliance Demonstration Method:**

For compliance with the standards for transfer (piping) systems, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

- c) The permittee controlling air emissions from a transfer system using covers in accordance with the provisions of paragraph (b)(i) above shall meet the requirements specified in paragraphs (c)(i) through (c)(vi) below: [40 CFR 63.689 (d)]
  - i. The cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the off-site material as it is conveyed by the transfer system except for the openings at the inlet and outlet to the transfer system through which the off-site material passes. The inlet and outlet openings used for passage of the off-site material through the transfer system shall be the minimum size required for practical operation of the transfer system.
  - ii. The cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section joints or between the interface of the cover edge and its mounting.
  - iii. Except for the inlet and outlet openings to the transfer system through which the off-

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- site material passes, each opening in the cover shall be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device.
- iv. The cover and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the cover and closure devices shall include: organic vapor permeability; the effects of any contact with the material or its vapors conveyed in the transfer system; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the transfer system on which the cover is installed.
  - v. Whenever an off-site material is in the transfer system, the cover shall be installed with each closure device secured in the closed position except as specified in paragraph (c)(v)(1) or (c)(v)(2) below.
    - 1) Opening of closure devices or removal of the cover is allowed to provide access to the transfer system for performing routine inspection, maintenance, repair, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a hatch or remove the cover to repair conveyance equipment mounted under the cover or to clear a blockage of material inside the system. Following completion of the activity, the permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable.
    - 2) Opening of a safety device, as defined in 40 CFR 63.681 of Subpart DD, is allowed at any time conditions require it to do so to avoid an unsafe condition.
  - vi. The permittee shall inspect the air emission control equipment in accordance with the requirements specified in **Specific Monitoring Requirements (b)**.

**Compliance Demonstration Method:**

For compliance with the standards for transfer system using covers, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

**Standards: Process vents (40 CFR63.690)**

- d) The permittee shall route the vent stream from Evaporation, Vacuum System and Distillation Process, Automatic Drum Decant System (ADDS)/Shredder, Drum Shredder with N<sub>2</sub> purge, and solids separator through a closed-vent system to a control device that meets the standards specified in paragraph (e) below. For the purpose of complying with this paragraph, a primary condenser is not a control device; however, a second condenser or other organic recovery device that is operated downstream of the primary condenser is considered a control device. [40 CFR Part 63.690 (b)]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Compliance Demonstration Method:**

For compliance with the standards for process vents, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

**Standards: Closed -vent systems and control devices (40 CFR 63.693)**

- e) For each closed-vent system and control device used to comply with this section, the permittee shall meet the following requirements:
  - i. The permittee shall use a closed-vent system that meets the requirements specified in paragraph (c) above.
  - ii. Whenever gases or vapors containing HAP are vented through a closed-vent system connected to a control device used to comply with this section, the control device must be operating except at those times listed in either paragraph (e)(ii)(1) or (e)(ii)(2) below.
    - 1) The control device may be bypassed for the purpose of performing planned routine maintenance of the closed-vent system or control device in situations when the routine maintenance cannot be performed during periods that the emission point vented to the control device is shutdown. On an annual basis, the total time that the closed-vent system or control device is bypassed to perform routine maintenance shall not exceed 240 hours per each calendar year.
    - 2) The control device may be bypassed for the purpose of correcting a malfunction of the closed-vent system or control device. The owner or operator shall perform the adjustments or repairs necessary to correct the malfunction as soon as practicable after the malfunction is detected.
  - iii. The permittee shall inspect and monitor each closed-vent system in accordance with the requirements specified in either paragraph (e)(iii)(1) or (e)(iii)(2) of this section.
    - 1) The permittee inspects and monitors the closed-vent system in accordance with the requirements specified in 40 CFR 63.695(c) of this subpart, and complies with the applicable recordkeeping requirements in 40 CFR 63.696 of this subpart and the applicable reporting requirements in 40 CFR 63.697 of this subpart.
    - 2) As an alternative to meeting the requirements specified in paragraph (b)(4)(i) of this section, the owner or operator may choose to inspect and monitor the closed-vent system in accordance with the requirements under 40 CFR part 63, subpart H—National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks as specified in 40 CFR 63.172(f) through (h), and complies with the applicable recordkeeping requirements in 40 CFR 63.181 and the applicable reporting requirements in 40 CFR 63.182.
  - iv. The permittee shall maintain records for each control device in accordance with the requirements specified in **Specific Recordkeeping Requirements (b)**.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- v. The owner or operator shall prepare and submit reports for each control device in accordance with the requirements specified in **Specific Reporting Requirements (b)**.
- f) The permittee shall comply with paragraph (d) above and use a closed-vent system that meets the following requirements: [40 CFR Part 63.693 (c)(1)]
  - i. The vent stream required to be controlled shall be conveyed to the control device by a closed-vent system that is designed to operate with no detectable organic emissions using the procedure specified in **Testing Requirements (a)** below.
  - ii. In situations when the closed-vent system includes bypass devices that could be used to divert a vent stream from the closed-vent system to the atmosphere at a point upstream of the control device inlet, each bypass device must be equipped with either a flow indicator as specified in paragraph (e)(ii)(A) below or a seal or locking device as specified in paragraph (e)(ii)(B) below. For the purpose of complying with this paragraph, low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, or pressure relief valves needed for safety reasons are not subject to the requirements of this paragraph.
    - A) If a flow indicator is used, the indicator must be installed at the entrance to the bypass line used to divert the vent stream from the closed-vent system to the atmosphere. The flow indicator must indicate a reading at least once every 15 minutes. The permittee shall maintain records of the following information: hourly records of whether the flow indicator was operating and whether flow was detected at any time during the hour; and records of all periods when flow is detected or the flow indicator is not operating.
    - B) If a seal or locking device is used to comply with paragraph (ii), the device shall be placed on the mechanism by which the bypass device position is controlled (e.g., valve handle, damper lever) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve.
- g) The permittee shall use a thermal oxidizer in order to comply with paragraph (d) above that shall comply with the following performance specifications: [40 CFR Part 63.693 (f)(1)(iii)]
  - i. Maintain the conditions in the thermal oxidizer combustion chamber at a residence time of 0.5 seconds or longer and at a temperature of 760°C or higher.
- h) The permittee shall monitor the operation of the thermal oxidizer required in paragraph f) above in accordance with the requirements of **Specific Monitoring Limitations (c)** using a continuous monitoring system as specified below: [40 CFR Part 63.693 (e)(3)(i), (iii) and (iv)]
  - i. A continuous monitoring system to measure and record the daily average temperature of the exhaust gases from the control device. The accuracy of the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

temperature monitoring device must be !1 percent of the temperature being measured, expressed in degrees Celsius of !0.5°C, whichever is greater.

- ii. A continuous monitoring system to measure and record the daily average concentration of organic compounds in the exhaust vent stream from the control device. The organic monitoring system must comply either with Performance Specification 8 or 9 in 40 CFR Part 60, Appendix B. The relative accuracy provision of Performance Specification 8, Sections 2.4 and 3 need not be conducted.
- iii. A continuous monitoring system that measures alternative operating parameters other than those specified in preceding paragraphs g)i) or g)ii) upon approval of the Administrator and the Division.

**Compliance Demonstration Method:**

For compliance with the standards for Closed -vent systems and control devices, see Subsection 3 Testing Requirements, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

- i) Control of Potentially Hazardous Matter and Toxic Substances. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020 Section 3]

**Compliance Demonstration Method:**

For compliance with the control of Potentially Hazardous Matter and Toxic Substances, see **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

**2. Emission Limitations:**

None

**3. Testing Requirements:**

- a) The closed-vent system that is used to comply with **Operating Limitations (f) (i)** shall be tested in accordance to the following requirements: [40 CFR Part 63.694 (k)]
  - i. The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked quarterly. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- relief valve.
- ii. The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
  - iii. The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
  - iv. The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
  - v. Calibration gases shall be as follows:
    - A) Zero air (less than 10 ppmv hydrocarbon in air); and
    - B) A mixture of methane or n-hexane in air at a concentration of approximately, but less than, 10,000 ppmv.
  - vi. The permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the permittee chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
  - vii. Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.
  - viii. The permittee shall determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (a)(viii)(A) or (a)(viii)(B) below:
    - A) If the permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(ix) below.
    - B) If the permittee chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (a)(vi) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(ix) below.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- ix. A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(ix)(A) and (a)(ix)(B) below.
    - A) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(viii) above is less than 500 ppmv.
    - B) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(viii) above is less than 10,000 ppmv.
4. **Specific Monitoring Requirements:**
- a) The closed-vent system that is used to comply with **Operating Limitations (f) (i)** shall be inspected and monitored in accordance with the following requirements: [40 CFR 63.695 (c)]
    - i. After initial startup, the permittee shall inspect and monitor the closed-vent system as follows: [40 CFR 63.695 (c)(1)(ii)]
      - A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air emissions. The permittee shall monitor a component or connection using the procedures specified in **Testing Requirements (a)** to demonstrate that it operates with no detectable organic emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).
      - B) Closed-vent system components or connections other than those specified in paragraph (a)(i)(A) above, shall be monitored at least once per year using the procedures specified in **Testing Requirements (a)** to demonstrate that components or connections operate with no detectable organic emissions.
      - C) The continuous monitoring system shall monitor and record either an instantaneous data value at least once every 15 minutes or an average value for intervals of 15 minutes or less.
    - ii. In the event that a defect or leak is detected, the permittee shall repair the defect or leak in accordance with the requirements of paragraph (a)(iv) below. [40 CFR 63.695 (c)(1)(iii)]
    - iii. The permittee shall maintain a record of the inspection and monitoring in accordance with the requirements specified in **Specific Recordkeeping Requirements (b)**. [40 CFR 63.695 (c)(1)(iv)]
    - iv. The permittee shall repair all detected defects as follows: [40 CFR 63.695 (c)(3)]
      - A) The permittee shall make first efforts at repair of the defect no later than 5

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calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection.

- B) Repair of a defect may be delayed beyond 45 calendar days if either of the conditions specified in paragraph (iv)(B)(1) or (iv)(B)(2) occurs. In this case, the permittee shall repair the defect the next time the process or unit that vents to the closed-vent system is shutdown. Repair of the defect must be completed before the process or unit resumes operation.
    - (1) Completion of the repair is technically infeasible without the shutdown of the process or unit that vents to the closed-vent system.
    - (2) The permittee determines that the air emissions resulting from the repair of the defect within the specified period would be greater than the fugitive emissions likely to result by delaying the repair until the next time the process or unit that vents to the closed-vent system is shutdown.
  - C) The permittee shall maintain a record of the defect repair in accordance with the requirements specified in **Specific Recordkeeping Requirements (b).**
- b) The transfer system equipped with a cover as specified in **Operating Limitations (b) (i)** shall meet the following inspection requirements: [40 CFR Part 63.695 (d)]
- i. The cover and its closure devices shall be visually inspected by the permittee to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover sections or between the cover and its mounting; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case when a transfer system is buried partially or entirely underground, inspection is required only for those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., access hatches, etc.) and can be opened to the atmosphere.
  - ii. The permittee shall perform an initial inspection following installation of the cover. Thereafter, the permittee shall perform the inspections at least once every calendar year.
  - iii. In the event that a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (v) below.
  - iv. The permittee shall maintain a record of the inspection in accordance with the requirements specified in 40 CFR 63.696 of Subpart DD.
  - v. The permittee shall repair all detected defects as follows:
    - 1) The permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (b)(v)(2) of this section.
    - 2) Repair of a defect may be delayed beyond 45 calendar days if the permittee determines that repair of the defect requires emptying or temporary removal from service of the transfer system and no alternative transfer system is available at



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the site to accept the material normally handled by the system. In this case, the permittee shall repair the defect the next time the process or unit that is generating the material handled by the transfer system stops operation. Repair of the defect must be completed before the process or unit resumes operation.

- c) The permittee shall ensure that the thermal oxidizer required under **Operating Limitations (g)** operates properly by monitoring the thermal oxidizer in accordance with the requirements specified in paragraphs (c)(i) through (c)(vii) below. [40 CFR 63.695 (e)(1) - (e)(7)]
  - i. A continuous parameter monitoring system must be used to measure the operating parameter or parameters specified for the thermal oxidizer under **Operating Limitations (g)**. The continuous parameter monitoring system must meet the following specifications and requirements:
    - A) The continuous parameter monitoring system must measure either an instantaneous value at least once every 15 minutes or an average value for intervals of 15 minutes or less and continuously record either:
      - (1) Each measured data value; or
      - (2) Each block average value for each 1-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.
    - B) The monitoring system must be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications or other written procedures that provide reasonable assurance that the monitoring equipment is operating properly.
  - ii. Using the data recorded by the monitoring system, the permittee shall calculate the daily average value for each monitored operating parameter for each operating day. If operation of the control device is continuous, the operating day is a 24-hour period. If control device operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average.
  - iii. For each monitored operating parameter, the permittee shall establish a minimum operating parameter value or a maximum operating parameter value, as appropriate, to define the range of conditions at which the control device must be operated to continuously achieve the applicable performance requirements specified under **Operating Limitations (g)**. Each minimum or maximum operating parameter value must be established in accordance with the requirements in paragraph (c)(iii)(A) below.
    - A) If the permittee uses a control device design analysis to demonstrate control device performance, then the minimum or maximum operating parameter value

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must be established based on the control device design analysis and supplemented, as necessary, by the control device manufacturer recommendations or other applicable information.

- iv. An excursion for a given control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in paragraphs (c)(iv)(A) through (c)(iv)(C) below being met. When multiple operating parameters are monitored for the same control device and during the same operating day more than one of these operating parameters meets an excursion criterion specified in paragraphs (c)(iv)(A) through (c)(iv)(C) below, then a single excursion is determined to have occurred for the control device for that operating day.
  - A) An excursion occurs when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit) established for the operating parameter in accordance with the requirements of paragraph (c)(iii) above.
  - B) An excursion occurs when the period of control device operation is 4 hours or greater in an operating day and the monitoring data are insufficient to constitute a valid hour of data for at least 75 percent of the operating hours. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.
  - C) An excursion occurs when the period of control device operation is less than 4 hours in an operating day and more than 1 of the hours during the period does not constitute a valid hour of data due to insufficient monitoring data. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.
- v. For each excursion, except as provided for in paragraph (c)(vi) of this section, the permittee shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard.
- vi. An excursion is not a violation of this standard under any one of the conditions specified in paragraphs (c)(vi)(A) through (c)(vi)(B) below.
  - A) An excursion is not a violation nor does it count toward the number of excused excursions allowed under paragraph (c)(vi)(B) of this section when the excursion occurs during any one of the following periods:
    - (1) During a period of startup, shutdown, or malfunction when the affected facility is operated during such period in accordance with the facility's startup, shutdown, and malfunction plan; or
    - (2) During periods of non-operation of the unit or the process that is vented to the control device (resulting in cessation of HAP emissions to which the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

monitoring applies).

- B) For each control device, one excused excursion is allowed per semiannual period for any reason. The initial semiannual period is the 6-month reporting period addressed by the first semiannual report submitted by the permittee in accordance with 40 CFR 63.697(b)(4) of Subpart DD.

vii. Nothing in paragraphs (c)(i) through (c)(vi) of this section shall be construed to allow or excuse a monitoring parameter excursion caused by any activity that violates other applicable provisions of Subpart DD.

**5. Specific Recordkeeping Requirements:**

- a) The permittee shall comply with the recordkeeping requirements in 40 CFR 63.10 under 40 CFR 63 Subpart A - General Provisions that are applicable to Subpart DD as specified in Table 2 of Subpart DD. [40 CFR 63.696 (a)]
- b) The permittee shall maintain records in accordance with the requirements of 40 CFR 63.10, including the following: [40 CFR 63.696 (b)]
  - i. Maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. [40 CFR 63.10(b)(1)]
  - ii. Maintain relevant records for affected source as follows: [40 CFR 63.10(b)(2)]
    - A) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
    - B) The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;
    - C) All required maintenance performed on the air pollution control and monitoring equipment;
    - D) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see 40 CFR 63.6(e)(3));
    - E) All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see 40 CFR 63.6(e)(3)) when all actions taken during periods of startup, shutdown, and malfunction (including

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);

- F) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
- G) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
  - (1) This paragraph applies to the permittee required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(ii)(G) above, the permittee shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.
  - (2) This paragraph applies to the permittee required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(ii)(G) above, the permittee shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Division.
  - (3) The Division, upon notification to the source, may require the permittee to maintain all measurements as required by paragraph (b)(ii)(G) above, if the Division or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.
- H) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
- I) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- J) All CMS calibration checks;
- K) All adjustments and maintenance performed on CMS;

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- L) All documentation supporting initial notification and notifications of compliance status under 40 CFR 63.9.
- c) The permittee shall record, on a semiannual basis, the information specified in paragraphs (c)(i) and (c)(ii) below for those planned routine maintenance operations that would require the control device not to meet the requirements specified under **Operating Limitations (f)**. [40 CFR 63.696 (g)]
- i. A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.
  - ii. A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6 months that the control device did not meet the requirement of **Operating Limitations (f)**, due to planned routine maintenance.
- d) The permittee shall record the information specified in paragraphs (d)(i) through (d)(iii) below for those unexpected control device system malfunctions that would require the control device not to meet the requirements specified under **Operating Limitations (f)**. [40 CFR 63.696 (h)]
- i. The occurrence and duration of each malfunction of the control device system.
  - ii. The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.
  - iii. Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

**6. Specific Reporting Requirements:**

- a) The permittee shall comply with the reporting requirements in 40 CFR 63.10 under 40 CFR 63 Subpart A - General Provisions that are applicable to Subpart DD as specified in Table 2 of Subpart DD. [40 CFR 63.697 (a)(2)]
- b) The permittee shall submit a startup, shutdown, and malfunction report specified in 40 CFR 40 CFR 63.10 (d)(5) to the Division: [40 CFR 63.697 (b)(3)]
  - i. If actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 40 CFR 63.6(e)(3), the permittee shall state such information in a startup, shutdown, and malfunction report. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the permittee or other responsible official who is certifying its

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

accuracy, that shall be submitted to the Division semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit).

- ii. Separate startup, shutdown, or malfunction reports are not required if the information is included in the summary report specified in paragraph (b)(4) of this section.
  
- c) A summary report specified in 40 CFR 40 CFR 63.10(e)(3) shall be submitted by the permittee on a semiannual basis (i.e., once every 6-month period). The summary report must include a description of all excursions as defined in **Specific Monitoring Requirements c)** that have occurred during the 6-month reporting period. For each excursion caused when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit), the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the period that the exceedance occurred. For each excursion caused by lack of monitoring data, the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected the preceding sentence shall be the same as the procedures specified in 40 CFR 63.10(e)(3).

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****GROUP REQUIREMENTS****05 (NF1-NF10)      Ten 18,500 Gallon Fixed Roof Waste Organic Solvent Storage Tanks****Description:**

Maximum fill rate per tank: 12,000 gallons/hour.

Maximum annual throughput for all ten tanks combined: 16,800,000 gallons

Construction commenced - 1976

**06 (S1-S14)      Fourteen Fixed Roof Waste Organic Solvent Storage Tanks****Description:**

Maximum fill rate per tank: 12,000 gallons/hour

Maximum annual throughput for all 14 tanks combined: 13,950,000 gallons

One 20,000 gallon      Constructed June 1971.

One 16,000 gallon      Constructed June 1979.

Eight 15,000 gallon      Constructed September 1982.

Four 8,000 gallon      Three constructed June 1973, one constructed June 1976.

**07 (D1-D7)      Seven 7,500 Gallon Fixed Roof Waste Organic Solvent Storage Tanks****Description:**

Maximum fill rate per tank: 12,000 gallons/hour.

Maximum annual throughput for all seven tanks combined: 1,500,000 gallons

Construction commenced - 1984

**08 (R1-R11)      Eleven Fixed Roof Storage Tanks**

Maximum fill rate per tank: 12,000 gallons/hour

Maximum throughput for all eleven tanks combined: 3,700,000 gallons

Waste Organic Solvent Tanks (R1 through R5):

Three 10,000 gallon      one constructed 1970, two constructed 1980

Two 6,000 gallon      constructed 1983.

Organic Solvent Tanks (R6 through R11):

Six 6,500 gallon      constructed 1985.

**11 (V1-V5)      Two 20,000 Gallon Fixed Roof Waste Organic Solvent Storage Tanks\*  
Three 15,000 Gallon Fixed Roof Waste Organic Solvent Storage Tanks****Description:**

Maximum fill rate per tank: 12,000 gallons/hour

Maximum annual throughput for all five tanks combined: 15,150,000 gallons

Construction commenced - 1986

**20 (HPV-1, HPV-2)      Two 15,000 Gallon Homogenizing Process Vessels****Description:**

Maximum fill rate per tank: 12,000 gallons per hour

Maximum annual throughput per vessel: 15,000,000 gallons

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Construction commenced - 1986

\*Tanks that are subject to 40 CFR 60, Subpart Kb

**Control Device:** Fixed Roof Tanks with Closure Device

**APPLICABLE REGULATIONS:**

40 CFR 63, Subpart DD: National Emission Standards for Hazardous Air Pollutant Emissions from Off-Site Waste and Recovery Operations.

40 CFR 63, Subpart OO - National Emission Standards for Tanks - Level 1 (*40 CFR 63, Subpart OO requirements are sub-referenced by 40 CFR Part 63.685 (c)(2)(i) (40 CFR 63, Subpart DD)*)

40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced After July 23, 1984. (*This regulation is applicable to two (2) 20000 gallon fixed roof tanks under emission unit # 11*)

401 KAR 63:002, Sections 2 and 3(1)(x) - *40 CFR Part 63.680 to 63.698 (Subpart DD) National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations, incorporated by reference*

401 KAR 63:002, Section 3(1) (gg) - *40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants, Subpart OO, incorporated by reference.*

401 KAR 60:005, Section 3(1) (q) - *40 C.F.R. Part 60 Standards of Performance for Volatile Organic Liquid Storage Vessels, Subpart Kb, incorporated by reference.*

401 KAR 63:020, *Potentially hazardous matter or toxic substances.*

**1. Operating Limitations:**

- a) The permittee shall control air emissions from each tank using Tank Level I controls which shall meet the following requirements. [40 CFR 63.685 (c)(1), (c)(2)(ii)]
  - i. The permittee shall determine the maximum HAP vapor pressure for an off-site material to be managed in each tank using Tank Level 1 controls before the first time the off-site material is placed in the tank. The maximum HAP vapor pressure shall be determined using the procedures specified in 40 CFR 40 CFR 63.694(j). Thereafter, the permittee shall perform a new determination whenever changes to the off-site material managed in the tank could potentially cause the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3 or Table 4 of 40 CFR 63, Subpart DD, as applicable to the tank.
  - ii. The permittee shall control air emissions from each tank in accordance with the applicable provisions in Subpart OO of 40 CFR Part 63 - National Emission Standards for Tanks - Level I, 40 CFR 40 CFR 63.900-63.908, specified below.

**Compliance Demonstration Method:**

For compliance with the standards for each tank using level 1 controls, see Subsection 3 Testing Requirements, see Subsection 4, Specific Monitoring Requirements, and



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

## Subsection 5, Specific Recordkeeping Requirements.

- b) The tanks shall be equipped with a fixed roof designed to meet the following specifications: [40 CFR 63.902 (b)]
  - i. The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).
  - ii. The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.
  - iii. Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:
    - A) equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or
    - B) connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever regulated material is managed in the tank.
  - iv. The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the regulated-material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the liquid or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

**Compliance Demonstration Method:**

For compliance with the standards for each tank with fixed roof design, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

- c) Whenever a regulated-material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows: [40 CFR 63.902 (c)]
  - i. Opening of closure devices or removal of the fixed roof is allowed at the following times:
    - A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

- B) To remove accumulated sludge or other residues from the bottom of tank.
- ii. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the permittee based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the container internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.
- iii. Opening of a safety device, as defined in 40 CFR 63.901 of Subpart OO, is allowed at any time conditions require it to do so to avoid an unsafe condition.
- d) The permittee shall inspect the air emission control equipment in accordance with the requirements specified in **Specific Monitoring Requirements (a)**. [40 CFR 63.902 (d)]
- e) Control of Potentially Hazardous Matter and Toxic Substances. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020 Section 3]

**Compliance Demonstration Method:**

For compliance with the control of Potentially Hazardous Matter and Toxic Substances, see **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations:**

None

**3. Testing Requirements:**

- a) The permittee shall use the following procedures for determining no detectable organic emissions for the purpose of complying with 40 CFR 63, Subpart OO. [40 CFR 63.902(a)]
  - i. The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked quarterly. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
  - ii. The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
  - iii. The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
  - iv. The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
  - v. Calibration gases shall be as follows:
    - A) Zero air (less than 10 ppmv hydrocarbon in air); and
    - B) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmv.
  - vi. The permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the permittee chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
  - vii. Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

viii. The permittee shall determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (a)(viii)(A) or (a)(viii)(B) below.

A) If an permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(ix) of this section.

B) If the permittee chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (a)(vi) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(ix) of this section.

ix. A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(ix)(A) and (a)(ix)(B) of this section.

A) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(viii) is less than 500 ppmv.

B) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(viii) is less than 10,000 ppmv.

**4. Specific Monitoring Requirements:**

a) For each tank, all of which are equipped with a fixed roof in accordance to **Operating Limitations (b)**, the permittee shall meet the following requirements: [40 CFR 63.906 (a)]

- i. The fixed roof and its closure devices shall be visually inspected by the permittee to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
- ii. The permittee shall perform an initial inspection following installation of the fixed roof. Thereafter, the permittee shall perform the inspections at least once every calendar year except as provided for in paragraph (d) below.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- iii. In the event that a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (b) below.
  - iv. The permittee shall maintain a record of the inspection in accordance with the requirements specified in **Specific Recordkeeping Requirements (a)**.
- b) The permittee shall repair all detected defects as follows: [40 CFR 63.906 (b)]
- i. The permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (b)(ii) below.
  - ii. Repair of a defect may be delayed beyond 45 calendar days if the permittee determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the regulated material normally managed in the tank. In this case, the permittee shall repair the defect the next time alternative tank capacity becomes available and the tank can be emptied or temporarily removed from service, as necessary to complete the repair.
- c) The permittee shall maintain a record of the defect repair in accordance with the requirements specified in **Specific Recordkeeping Requirements (b)**. [40 CFR 63.906 (c)]
- d) Alternative inspection and monitoring interval. Following the initial inspection and monitoring of a fixed roof in accordance with this section, subsequent inspection and monitoring of the equipment may be performed at intervals longer than 1 year when the permittee determines that performing the required inspection or monitoring procedures would expose a worker to dangerous, hazardous, or otherwise unsafe conditions and the permittee complies with the requirements specified in paragraphs (d)(i) and (d)(ii) of this section. [40 CFR 63.906 (d)]
- i. The permittee shall prepare and maintain written documentation at the plant site identifying the specific air pollution control equipment designated as “unsafe to inspect and monitor.” The documentation must include for each piece of air pollution control equipment designated as such a written explanation of the reasons why the equipment is unsafe to inspect or monitor using the applicable procedures under this section.
  - ii. The permittee shall develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the air pollution control equipment under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.
- e) For each of the storage vessels, identified as V1 and V2, with a design capacity greater than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

pressure that is normally less than 27.6 kPa, the permittee shall notify the Division within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40 CFR 60.116b (d)]

- f) For each of the storage vessels, identified as V1 and V2, storing a waste mixture of indeterminate or variable composition, the permittee shall comply with the following requirements. [40 CFR 60.116b (f)]
  - i. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored shall be determined using the methods described in paragraph (g) below.
  - ii. For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in 40 CFR 40 CFR 60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
    - A) ASTM D2879–83, 96, or 97 (incorporated by reference—see 40 CFR 60.17); or
    - B) ASTM D323–82 or 94 (incorporated by reference—see 40 CFR 60.17); or
    - C) As measured by an appropriate method as approved by the Division.
- g) Available data on the storage temperature may be used to determine the maximum true vapor pressure of the storage vessels, identified as V1 and V2, as determined below. [40 CFR 60.116b (e)]
  - i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
  - ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
    - A) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference - see 40 CFR 60.17), unless the Division specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
    - B) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
  - iii. For other liquids, the vapor pressure:
    - A) May be obtained from standard reference texts, or

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- B) Determined by ASTM D2879 - 83, 96, or 97 (incorporated by reference - see 40 CFR 60.17); or
- C) Measured by an appropriate method approved by the Division; or
- D) Calculated by an appropriate method approved by the Division.

**5. Specific Recordkeeping Requirements:**

- a) The permittee shall prepare and maintain a record for each tank that includes the following information: [40 CFR 63.907 (a)]
  - i. A tank identification number (or other unique identification description as selected by the permittee).
  - ii. A description of the tank dimensions and the tank design capacity.
  - iii. The date that each inspection required by **Specific Monitoring Requirements (a)** is performed.
- b) The permittee shall record the following information for each defect detected during inspections required by **Specific Monitoring Requirements (b)**: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the **Specific Monitoring Requirements (b)(ii)**, the permittee shall also record the reason for the delay and the date that completion of repair of the defect is expected. [40 CFR 63.907 (b)]

**6. Specific Reporting Requirements:**

None

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****22 (-) Pipeline Equipment****Description:**

Pipeline equipment:

Pumps - 22 (count)

Flanges - 346 (count)

Valves - 1026 (count)

Open Ended Lines - 314 (count)

**Control Equipment:** Leak Detection and Repair Program.

**APPLICABLE REGULATIONS:**

40 CFR 63, Subpart DD: National Emission Standards for Hazardous Air Pollutant Emissions from Off-Site Waste and Recovery Operations.

401 KAR 63:002, Sections 2 and 3(1)(x) - *40 CFR Part 63.680 to 63.698 (Subpart DD) National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations, incorporated by reference*

40 CFR 61, Subpart V- *National Emission Standards for Equipment Leaks*

401 KAR 57:002, Section 3(1) (r) - *40 C.F.R. Part 61 National Emission Standards for Hazardous Air Pollutants, Subpart V, incorporated by reference.*

401 KAR 63:020, *Potentially hazardous matter or toxic substances.*

**1. Operating Limitations:**

- a) The permittee shall control the HAP emitted from equipment leaks in accordance with the applicable provisions of 40 CFR 61.242 through 40 CFR 61.247 in 40 CFR Part 61, Subpart V - National Emission Standards for Equipment Leaks, specified in all conditions below. [40 CFR 63.691(b)(1)]
- b) Each piece of equipment to which 40 CFR 61, Subpart V applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment. [40 CFR 61.242-1 (d)]
- c) Equipment that is in vacuum service is excluded from the requirements of 40 CFR 61.242-2, to 40 CFR 61.242-11 if it is identified as required in 40 CFR 61.246(e)(5). [40 CFR 61.242-1 (e)]

**40 CFR 61.242-2 Standards: Pumps**

- d) Each pump shall be monitored monthly to detect leaks by the methods specified in **Testing Requirements (b).** [40 CFR 61.242-2 (a)(1)]
- e) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. [40 CFR 61.242-2 (a) (2)]



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- f) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 61.242-2 (b) (1)]
- g) If there are indications of liquids dripping from the pump seal, a leak is detected. [40 CFR 61.242-2 (b) (2)]
- h) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10. [40 CFR 61.242-2 (c) (1)]
- i) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 61.242-2 (c) (2)]
- j) Any pump that is designated, as described in **Specific Recordkeeping Requirements (c)**, for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (d) and (h) if the pump: [40 CFR 61.242-2 (e)]
  - i. Has no externally actuated shaft penetrating the pump housing,
  - ii. Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in **Testing Requirements (c)** , and
  - iii. Is tested for compliance with paragraph (j)(ii) initially upon designation, annually, and at other times requested by the Division.
- k) Any pump that is designated, as described in **Specific Recordkeeping Requirements (d)(i)** as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (d) and (e) above if: [40 CFR 61.242-2 (g)]
  - i. The permittee of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (d) and (e) above; and
  - ii. The permittee of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraphs (d) and (e) above if a leak is detected.
- l) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraph (e) above, provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 61.242-2 (h)]

**Compliance Demonstration Method:**

For compliance with the standards for pumps, see Subsection 3 Testing Requirements, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

## Recordkeeping Requirements.

**40 CFR 61.242-6 Standards: Open-ended valves or lines.**

- m) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. [40 CFR 61.242-6 (a) (1)]
- n) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. [40 CFR 61.242-6 (a)(2)]
- o) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 61.242-6 (b)]
- p) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraphs (m) and (n) above at all other times. [40 CFR 61.242-6 (c)]
- q) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (m), (n), (o) and (p) above. [40 CFR 61.242-6 (d)]
- r) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (m) through (p) above are exempt from the requirements of paragraphs (m) through (p). [40 CFR 61.242-6 (e)]

**Compliance Demonstration Method:**

For compliance with the standards for open-ended valves, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

**40 CFR 61.242-7 Standards: Valves.**

- s) Each valve shall be monitored monthly to detect leaks by the method specified in **Testing Requirements (b).** [40 CFR 61.242-7 (a)]
- t) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 61.242-7 (b)]
- u) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. [40 CFR 61.242-7 (c) (1)]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- v) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 61.242-7 (c) (2)]
- w) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242-10. [40 CFR 61.242-7 (d) (1)]
- x) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 61.242-7 (d) (2)]
- y) First attempts at repair include, but are not limited to, the following best practices where practicable: [40 CFR 61.242-7 (e)]
  - i. Tightening of bonnet bolts;
  - ii. Replacement of bonnet bolts;
  - iii. Tightening of packing gland nuts; and
  - iv. Injection of lubricant into lubricated packing.
- z) Any valve that is designated, as described in **Specific Recordkeeping Requirements (c)** for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (b) if the valve: [40 CFR 61.242-7 (f)]
  - i. Has no external actuating mechanism in contact with the process fluid;
  - ii. Is operated with emissions less than 500 ppm above background, as measured by the method specified in **Testing Requirements (c)** and
  - iii. Is tested for compliance with paragraph (z)(ii) above initially upon designation, annually, and at other times requested by the Division.
- aa) Any valve that is designated, as described in **Specific Recordkeeping Requirements (d)(i)** as an unsafe-to-monitor valve is exempt from the requirements of paragraph (s) above if: [40 CFR 61.242-7 (g)]
  - i. The permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (s); and
  - ii. The permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.
- bb) Any valve that is designated, as described in **Specific Recordkeeping Requirements (d)(ii)** as a difficult-to-monitor valve is exempt from the requirements of paragraph (s) if: [40 CFR 61.242-7 (h)]
  - i. The permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;
  - ii. The process unit within which the valve is located is an existing process unit; and
  - iii. The permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Compliance Demonstration Method:**

For compliance with the standards for valves, see Subsection 3 Testing Requirements, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

**40 CFR 61.242-10 Standards: Delay of repair.**

- cc) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. [40 CFR 61.242-7 (a)]
- dd) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service. [40 CFR 61.242-7 (b)]
- ee) Delay of repair for valves will be allowed if: [40 CFR 61.242-7 (c)]
  - i. The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
  - ii. When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.
- ff) Delay of repair for pumps will be allowed if: [40 CFR 61.242-7 (d)]
  - i. Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
  - ii. Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- gg) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. [40 CFR 61.242-7 (e)]

**Compliance Demonstration Method:**

For compliance with the standards for delay of repair, see Subsection 4, Specific Monitoring Requirements, and Subsection 5, Specific Recordkeeping Requirements.

- hh) Control of Potentially Hazardous Matter and Toxic Substances. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020 Section 3]

**Compliance Demonstration Method:**

For compliance with the control of Potentially Hazardous Matter and Toxic Substances, see **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

**2. Emission Limitations:**

None

**3. Testing Requirements:**

- a) The permittee shall follow the test methods and procedures specified in the paragraphs below to comply with the requirements provided in 40 CFR 61, Subpart V. [40 CFR 61.245 (a)]
- b) Monitoring, as required in **Operating Limitations**, shall comply with the following requirements: [40 CFR 61.245 (b)]
  - i. Monitoring shall comply with Method 21 of appendix A of 40 CFR part 60.
  - ii. The detection instrument shall meet the performance criteria of Method 21.
  - iii. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.
  - iv. Calibration gases shall be:
    - A) Zero air (less than 10 ppm of hydrocarbon in air); and
    - B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
  - v. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
- c) When equipment is tested for compliance with or monitored for no detectable emissions, the permittee shall comply with the following requirements: [40 CFR 61.245 (c)]
  - i. The requirements of paragraphs (b)(i) through (iv) above shall apply.
  - ii. The background level shall be determined, as set forth in Method 21.
  - iii. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
  - iv. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

**4. Specific Monitoring Requirements:**

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

See Operating Limitations

**5. Specific Recordkeeping Requirements:**

- a) The permittee shall comply with the recordkeeping requirements of 40 CFR 61, Subpart V. [40 CFR 61.246 (a)(1)]
- b) For more than one process unit subject to the provisions of 40 CFR 61, Subpart V, the permittee may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by each process unit. [40 CFR 61.246 (a)(2)]
- c) When each leak is detected as specified in **Operating Limitations**, the following requirements apply: [40 CFR 61.246 (b)]
  - i. A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
  - ii. The identification on a valve may be removed after it has been monitored for 2 successive months as specified in **Operating Limitations (u) and (v)** and no leak has been detected during those 2 months.
  - iii. The identification on equipment, except on a valve, may be removed after it has been repaired.
- d) When each leak is detected as specified in **Operating Limitations**, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location: [40 CFR 61.246 (b)]
  - i. The instrument and operator identification numbers and the equipment identification number.
  - ii. The date the leak was detected and the dates of each attempt to repair the leak.
  - iii. Repair methods applied in each attempt to repair the leak.
  - iv. "Above 10,000" if the maximum instrument reading measured by the methods specified in **Testing Requirements (a)** after each repair attempt is equal to or greater than 10,000 ppm.
  - v. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
  - vi. The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.
  - vii. The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
  - viii. Dates of process unit shutdowns that occur while the equipment is unrepaired.
  - ix. The date of successful repair of the leak.
- e) The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location: [40 CFR 61.246 (e)]
  - i. A list of identification numbers for equipment (except welded fittings) subject to the requirements of 40 CFR 61, Subpart V.
  - ii. A list of identification numbers for equipment that the permittee elects to designate

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background.
- iii. The designation of this equipment for no detectable emissions shall be signed by the permittee.
  - iv. The dates of each compliance test required in **Operating Limitations (j) and (z).**
  - v. The background level measured during each compliance test.
  - vi. The maximum instrument reading measured at the equipment during each compliance test.
  - vii. A list of identification numbers for equipment in vacuum service.
- f) The following information pertaining to all valves subject to the requirements specified in **Operating Limitations (aa) and (bb)** and to all pumps subject to the requirements specified in **Operating Limitations (k)** shall be recorded in a log that is kept in a readily accessible location: [40 CFR 61.246 (f)]
- i. A list of identification numbers for valves and pumps that are designated as unsafe to monitor, an explanation for each valve or pump stating why the valve or pump is unsafe to monitor, and the plan for monitoring each valve or pump.
  - ii. A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.
- g) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR 61, Subpart V and other specific subparts: [40 CFR 61.246 (i)]
- i. An analysis demonstrating the design capacity of the process unit, and
  - ii. An analysis demonstrating that equipment is not in VHAP service.
- h) Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

**6. Specific Reporting Requirements:**

- a) A report shall be submitted to the Division semiannually starting 6 months after the initial report, that includes the following information: [40 CFR 61.247 (b)]
  - i. Process unit identification.
  - ii. For each month during the semiannual reporting period,
    - A) Number of valves for which leaks were detected as described in 40 CFR 61.242–7(b) of 40 CFR 61.243–2.
    - B) Number of valves for which leaks were not repaired as required in 40 CFR 61.242–7(d).
    - C) Number of pumps for which leaks were detected as described in 40 CFR 61.242–2(b) and (d)(6).
    - D) Number of pumps for which leaks were not repaired as required in 40 CFR 61.242–2(c) and (d)(6).
    - E) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- iii. Dates of process unit shutdowns which occurred within the semiannual reporting period.
- iv. Revisions to items reported if changes have occurred since the initial report or subsequent revisions to the initial report.

Note: Compliance with the requirements of 40 CFR 61.10(c) is not required for revisions documented under this paragraph.

- v. The results of all performance tests and monitoring to determine compliance with no detectable emissions and with 40 CFR 40 CFR 61.243–1 and 61.243–2 conducted within the semiannual reporting period.
- b) An application for approval of construction or modification, 40 CFR 40 CFR 61.05(a) and 61.07, will not be required if: [40 CFR 61.247 (e)]
  - i. The new source complies with the standard, 40 CFR 61.242;
  - ii. The new source is not part of the construction of a process unit; and
  - iii. In the next semiannual report required by paragraph (6)(a) above, the information in paragraph 40 CFR 61.242 (a)(5) is reported.



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****25 (-) Container loading and unloading****Description:**

Containers- Larger than 0.46m<sup>3</sup> (121.5 gallons):

Ten (10) Roll Off Boxes

Fourteen (14) 40 yd<sup>3</sup> (8,079 gallon) Dump Trailers

Forty-eight (48) 1.5 yd<sup>3</sup> (303 gallon) Portable Hoppers

Constructed 1991

**Control Device:** Covers and Closure Devices as Applicable to the Containers

**APPLICABLE REGULATIONS**

40 CFR 63, Subpart DD: National Emission Standards for Hazardous Air Pollutant Emissions from Off-Site Waste and Recovery Operations

401 KAR 63:002, Sections 2 and 3(1)(x) - *40 CFR Part 63.680 to 63.698 (Subpart DD) National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations, incorporated by reference*

40 CFR 63, Subpart PP- *National Emission Standards for Containers - Level 1 Controls.*

401 KAR 63:002, Section 3(1) (hh) - *40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants, Subpart PP, incorporated by reference.*

401 KAR 63:020, *Potentially hazardous matter or toxic substances.*

**1. Operating Limitations:**

- a) The permittee shall control air emissions from each container, which has a design capacity greater than 0.46 m<sup>3</sup> and the container is not in light-material service as defined in 40 CFR 40 CFR 63.681, in accordance with the applicable standards for Container Level 1 controls as specified in 40 CFR Part 63, Subpart PP - National Emission Standards for Containers, specified in all conditions below. [40 CFR 63.688(b)(2)]
- b) The permittee shall utilize for each container a Container Level 1 control that shall consist of one of the following: [40 CFR 63.922 (b)]
  - i. A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in **Operating Limitations (f).**
  - ii. A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum, a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a bulk cargo container equipped with a screw-type cap).
  - iii. An open-top container in which an organic vapor-suppressing barrier is placed on or over the regulated-material in the container such that no regulated-material is

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

- c) A container used to meet the requirements of either paragraph (b)(ii) or (b)(iii) above shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the regulated-material to the atmosphere and to maintain the equipment integrity for as long as it is in service. Factors to be considered when selecting the materials for and designing the cover and closure devices shall include: organic vapor permeability, the effects of contact with the material or its vapor managed in the container; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for container on which the cover is installed. [40 CFR 63.922 (c)]
- d) Whenever a regulated-material is in a container using Container Level 1 controls, the permittee shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows: [40 CFR 63.922 (d)]
  - i. Opening of a closure device or cover is allowed for the purpose of adding material to the container as follows:
    - A) In the case when the container is filled to the intended final level in one continuous operation, the permittee shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.
    - B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either: the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaves the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.
  - ii. Opening of a closure device or cover is allowed for the purpose of removing material from the container as follows:
    - A) For the purpose of meeting the requirements of this section, an empty container as defined in 40 CFR 63.921 of Subpart PP may be open to the atmosphere at any time (e.g., covers and closure devices are not required to be secured in the closed position on an empty container).
    - B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 40 CFR 63.921 of Subpart PP, the permittee shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

material will be removed from the container within 15 minutes, or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

- iii. Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of regulated-material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the permittee shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.
  - iv. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the container internal pressure in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the container internal pressure is within the internal pressure operating range determined by the permittee based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the container internal pressure exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.
  - v. Opening of a safety device, as defined in 40 CFR 63.921 of Subpart PP, is allowed at any time conditions require it to do so to avoid an unsafe condition.
- e) The permittee shall inspect containers using Container Level 1 controls in accordance with the procedures specified in **Specific Monitoring Requirements (a)**. [40 CFR 63.920 (e)]
- f) For the purpose of compliance with **Operating Limitations (b)(i)**, containers shall be used that meet the applicable U.S. DOT regulations on packaging hazardous materials for transportation as follows: [40 CFR 63.920 (f)]
- i. The container meets the applicable requirements specified in 49 CFR part 178 - Specifications for Packagings or 49 CFR part 179 - Specifications for Tank Cars.
  - ii. Regulated-material is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107 subpart B - Exemptions; 49 CFR part 172 - Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173 - Shippers - General Requirements for Shipments and Packaging; and 49 CFR part 180 - Continuing Qualification and Maintenance of Packagings.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- iii. For the purpose of complying with this subpart, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in paragraph (f)(4) of this section.
- iv. For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this subpart, an owner or operator may comply with the exceptions for those packaging specified in 49 CFR 173.12(b).

**Compliance Demonstration Method:**

For compliance with the standards of each container using Container Level 1 control, see Subsection 3 Testing Requirements and see Subsection 4, Specific Monitoring Requirements.

- g) Control of Potentially Hazardous Matter and Toxic Substances. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020 Section 3]

**Compliance Demonstration Method:**

For compliance with the control of Potentially Hazardous Matter and Toxic Substances, see **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

**2. Emission Limitations:**

None

**3. Testing Requirements:**

- a) The permittee shall determine no detectable organic emissions as follows: [40 CFR 63.925(a)]
  - i. The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked quarterly. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
  - ii. The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- iii. The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
- iv. The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
- v. Calibration gases shall be as follows:
  - A) Zero air (less than 10 ppmv hydrocarbon in air); and
  - B) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmv.
- vi. The permittee may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If the permittee chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
- vii. Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.
- viii. The permittee shall determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (3)(a)(viii)(A) or (3)(a)(viii)(B) below.
  - A) If the permittee chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (3)(a)(ix) below.
  - B) If the permittee chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (3)(a)(6) above is compared with the applicable value for the potential leak interface as specified in paragraph (3)(a)(ix) below.
- ix. A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (3)(a)(ix)(i) and (3)(a)(ix)(ii) below.
  - A) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

detectable organic emissions if the organic concentration value determined in paragraph (3)(a)(viii) above is less than 500 ppmv.

- B) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (3)(a)(viii) above is less than 10,000 ppmv.

**4. Specific Monitoring Requirements:**

- a) For the subject containers using Container Level 1 controls in accordance with the **Operating Limitations (a), the permittee** shall inspect the container and its cover and closure devices as follows: [40 CFR 63.926 (a)]

- i. In the case when a regulated-material already is in the container at the time the permittee first accepts possession of the container at the facility site and the container is not emptied (i.e., does not meet the conditions for an empty container as defined in 40 CFR 63.921 of Subpart PP) within 24 hours after the container has been accepted at the facility site, the container and its cover and closure devices shall be visually inspected by the permittee to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. This inspection of the container must be conducted on or before the date that the container is accepted at the facility (i.e., the date that the container becomes subject to the standards under Subpart PP). For the purpose of this requirement, the date of acceptance is the date of signature of the facility permittee on the manifest or shipping papers accompanying the container. If a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (4)(a)(iii) below.
- ii. In the case when a container filled or partially filled with regulated-material remains unopened at the facility site for a period of 1 year or more, the container and its cover and closure devices shall be visually inspected by the permittee initially and thereafter, at least once every calendar year, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (4)(a)(iii) below.
- iii. When a defect is detected for the container, cover, or closure devices, the permittee shall either empty the regulated-material from the defective container in accordance with paragraph (4)(a)(iii)(A) below or repair the defective container in accordance with paragraph (4)(a)(iii)(B) below.
  - A) If the permittee elects to empty the regulated-material from the defective container, the permittee shall remove the regulated-material from the defective container to meet the conditions for an empty container (as defined in 40 CFR 63.921 of Subpart PP) and transfer the removed regulated-material to either a container that meets the applicable standards under Subpart PP or to a tank, process, or treatment unit that meets the applicable standards under the subpart referencing Subpart PP. Transfer of the regulated-material must be completed no later than 5 calendar days after detection of the defect. The emptied defective

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

container must be repaired, destroyed, or used for purposes other than management of regulated-material.

- B) If the permittee elects not to empty the regulated-material from the defective container, the permittee shall repair the defective container. First efforts at repair of the defect must be made no later than 24 hours after detection and repair must be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the regulated-material must be emptied from the container and the container must not be used to manage regulated-material until the defect is repaired.

**5. Specific Recordkeeping Requirements:**

None

**6. Specific Reporting Requirements:**

None

**SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)**

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee shall comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<b><u>Description</u></b>	<b><u>Generally Applicable Regulation</u></b>
1.	Boiler #2 fuel oil storage tank 550 gallons	None
2.	Ground Water Stripper	None
3.	Onsite Vehicle Traffic	401 KAR 63:010
4.	Twelve 19,000 Gallon Fixed Roof Organic Solvents Storage Tanks (A1-A12)	None
5.	Bottom loading of recovered solvent into tanker trucks	None



## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Compliance with 401 KAR 63:020 shall be determined as follows:
  - a) The permittee of an affected source shall conduct performance tests to determine the vinyl chloride emissions from EP #6, EP #11, EP # 22, EP # 23 and EP # 25, using the test methods and procedures approved by the Division.
  - b) Within 90 days following the performance test, the permittee shall use the results from the performance test in conjunction with an EPA approved dispersion modeling program, (Screen3, ISCST3, Aermoc) to show compliance with 63:020.
  - c) The Division may require additional testing and modeling of other pollutants in accordance with such methods as the Division shall prescribe.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V) 1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The permittee shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING  
REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality  
Florence Regional Office  
8020 Veterans Memorial Drive, Ste 110  
Florence, KY 41042

U.S. EPA Region IV  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta, GA 30303-8960

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

**SECTION G – GENERAL CONDITIONS****(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

## SECTION G – GENERAL CONDITIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

## SECTION G – GENERAL CONDITIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the permittee from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
  - a. Applicable requirements that are included and specifically identified in the permit and
  - b. Non-applicable requirements expressly identified in this permit.
17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

### (b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

### (c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.



## SECTION G – GENERAL CONDITIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit.

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - e. This requirement does not relieve the source of other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

## SECTION G – GENERAL CONDITIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 3346  
Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

**SECTION H - ALTERNATE OPERATING SCENARIOS**

Not Applicable.

**SECTION I - COMPLIANCE SCHEDULE**

Not Applicable.